

1/4/00

Allen,

I'm the attorney on Techalloy and was wondering what the current status was of the technical issues discussed in Mike's 10/14/99 Memo to file (attached). I know he was thinking that the CMI Order needs to be changed, but I'd like to see the changes to the SOW first and/or a copy of the proposed, altered work schedule Techalloy said it would submit. Right now I don't have a good sense of how things are being rearranged - I think seeing those 2 documents would help me.

Also, could you send me a final, signed copy of the Final Design? I asked Mike for it a few times, but he never got around to sending it to me.

not till
Feb 14 or so

Thanks, *John Doe*
6-7167

US EPA RECORDS CENTER REGION 5



1000793

MEMO TO SITE FILE

DATE: 14 October 1999

TO: Techalloy File

FROM: Michael Valentino *WV*
IL/IN/MN Compliance Section 1

RE: Modifications to CMI Consent Order and Scope of Work
Techalloy Company, Inc. Site, Union, IL
ILD 005 178 975

On Thursday, 7 October 1999, George Hamper and I met with Henry Lopes, Vice President, Techalloy Company, Inc., and Carlos Serna of Roy F. Weston, Inc. At Mr. Serna's request, we met to discuss the corrective measures implementation (CMI) schedule in the recently signed Administrative Order on Consent (Docket No. R8H-5-99-008, 30 September 1999). The major components of the corrective measures include: institutional controls; continuation of private well sampling program; continued operation of groundwater recovery system; soil stabilization within a corrective action management unit (CAMU) [for elevated metals in soils]; installation of an asphalt cap over the CAMU area; focused air sparging and soil vapor extraction (AS/SVE) system [for volatile organics in the vadose zone]; and groundwater monitoring.

The order of CMI tasks, as presented in the AOC and Statement of Work (SOW) calls for soil stabilization within the designated CAMU and construction of the cap *prior to* the final design and construction of the AS/SVE system. Techalloy and Weston have requested a change in the *sequence* of CMI tasks. The end result, as we shall see below, will *not* impact the project timeline; nor will any tasks fail to be performed. Elevated levels of organics, specifically of trichloroethene (TCE), at the two groundwater extraction wells have prompted a reevaluation on the part of Techalloy and Weston of the corrective measures sequence. The AS/SVE system targets volatile organics in the vadose zone. The drawdown from the two extraction wells, which are situated roughly 4000 feet down-gradient of the VOC source area and operated at approximately 600 gallons per minute, may be creating the higher levels of TCE in the influent to the air stripper. Techalloy and Weston therefore have proposed to expedite implementation of the AS/SVE component of the remedy. The intent is to reduce concentrations of VOCs in the current source area, thereby resulting in lower concentrations at the down-gradient recovery wells.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

11/23/04

Mr. Scott Carr
Environmental Coordinator
Techalloy Company, Inc
6509 Olson Road. P.O. Box 423
Union, IL 60180-0423

Re: Reduction of Financial Assurance
Administrative Order for Corrective Measures Implementation
Techalloy Company Inc, ILD 005 178 975

Dear Mr. Carr,

We have reviewed the estimated operation schedule of groundwater extraction and soil vapor extraction systems and the financial assurance cost estimate submitted to us on September 27, 2004. This document was submitted by Matrix Environmental Inc. for Techalloy Company Inc. in response to a query by Ms. Margaret Rosegay to Ms. Jacqueline Miller, Associate Regional Counsel, USEPA about reducing the amount of financial assurance provided by Techalloy as required by the Administrative Order for Corrective Measures Implementation (CMI Order) issued on September 30, 1999. In her letter of July 9, 2004 Ms. Miller responded that, in recognition of Techalloy's construction and implementation of corrective measures, we will reduce the financial assurance to an amount equal to Techalloy's best projection of the cost of continuing to perform, operate and maintain the corrective measure tasks required by the CMI Order until the date when Techalloy realistically expects that all the required performance standards will be attained.

The listed operation and maintenance of tasks in the submitted document is in agreement with CMI Order. It projects the cost estimate for the maintenance of the asphalt cap for 28 years, the maintenance of the soil vapor extraction and sparging systems for 3 years and the maintenance of the ground water extraction system for 14 years. The rationale provided for the projected maintenance schedule and the cost estimates is reasonable and is justified by groundwater monitoring data and monthly discharge reports. As requested, we hereby approve the reduction of financial assurance from \$3 million to \$561,000. Please be informed that this change will be implemented as a modification to the CMI Order.



Jacqueline
Miller/R5/USEPA/US
10/13/2004 11:26 AM

To
Subject Techalloy CMI Order

Bhooma, I have an e-copy of the CMI Order, but it doesn't seem to be the final (page numbering doesn't match up with the signed CMI Order I have). So I won't send that to you.

But what might be more useful to you is an e-copy of the October 2001 Modification to the CMI Order, which we could use as a template for a future Modification to address Section XXII, Financial



Responsibility. It is attached here Modification of AOC for CMI.wpd

As i mentioned in my voicemail, Techalloy's parent's attorney has been talking to me about what new corporate guarantee paperwork EPA would want to see when the FA amount is lowered. As there are not applicable regulations for RCRA corrective action and financial assurance, in the past we've used 265.143, 265.145, 265.151, but if Techalloy's parent wants to use some "streamlined" method of redoing the FA paperwork now, EPA may need to depart from those regs., as long as the FA that is provided seems binding and reliable. Someone at HQ is supposed to be getting in touch with me to discuss the issue.

Jacqueline Miller
312/886-7167

July 9, 2004

Ms. Margaret Rosegay
Pillsbury Winthrop
P.O. Box 7880
San Francisco, CA 94120-7880

Re: Techalloy Company, Inc.

Dear Ms. Rosegay:

We at U.S. EPA's Region 5 offices have had the opportunity to consider your inquiry as to whether U.S. EPA would be willing to: 1) execute the Acknowledgment of Termination (attached to, and referenced by, the Administrative Order for Corrective Measures Implementation, EPA Docket No. R8H-5-99-008, which was issued on September 30, 1999; hereinafter the "CMI Order"); and 2) terminate the financial assurance provided by Techalloy through a corporate guarantee made by Ugine-Savoie Imphy. This letter provides our views on these issues.

As you point out, on September 9, 2002, U.S. EPA's Allen Wojtas (who, at the time, was U.S. EPA's Project Coordinator) sent a letter to Techalloy stating that after inspecting the Techalloy facility he had determined that corrective measures required by the CMI Order had been implemented and that technical requirements of the CMI Order had been met. His letter then noted that Techalloy should continue to perform semi-annual monitoring and all other operation and maintenance (O & M) activities. In other words, Wojtas determined that all physical and other controlling elements of the required corrective measures were in place and operating, but that the corrective measures needed to be operated and maintained in future, until all performance standards were met.

As of today, Techalloy is actively performing two elements of the corrective measures prescribed for the facility: the groundwater recovery and treatment system, and the airsparge/soil vapor extraction system. Techalloy is obligated to continue operating these systems until the performance standards established in the final design documents are achieved (as required by the CMI Order, Section VIII, paras. E and J, and the Scope of Work attached to the CMI Order). Techalloy has other, related, obligations, such as performing semi-annual monitoring of groundwater at designated wells. *[Bhooma – as I recall T has no ongoing obligations with respect to private wells, because those have all been hooked up to City water. Correct? Any other significant obligations that should be noted here?]*

Jacqueline
Miller/R5/USEPA/US
06/25/2004 04:29 PM

To
Subject Fw: Techalloy – terminating CMI Order?

Bhooma, I was wondering if you'd had a chance to think about the termination of the CMI Order for Techalloy, or reduction of the Financial Assurance, since I sent you the e-mail below a couple of weeks ago. If you'd like to talk about this, I'm working at home next week (T, W, F) – phone is 630/654-4571. If your management has no opinion on the issue, I suppose it is up to you and I to make the decision (I could also try to find out if anyone in EPA has experience with the issues, via a national RCRA call or sending some e-mails).

Also, I spoke with the McHenry County Health Department – Patrick McNulty (he may be the director). He said that the County only has authority over permitting new wells that would serve individual users; "large wells" that would serve subdivisions, etc. are processed through EPA. That being said, he also said that Illinois law allows a potential well developer to show that it can meet health requirements even if there is contaminated groundwater in the area. For that reason, the County could not issue an ordinance or law that barred all new wells in the area of the TEchalloy plume.

Instead, the County will handle all applications for new (individual) wells in that area on a case by case basis. The County has some kind of a map that it references that shows the location of the Techalloy plume, so the County knows when a well application is of concern. But, McNulty said that to date they have received no application to install a new well in this area.

— Forwarded by Jacqueline Miller/R5/USEPA/US on 06/25/04 04:24 PM —

Jacqueline Miller
06/09/04 04:16 PM

To: Bhooma Sundar/R5/USEPA/US@EPA
cc:
Subject: Techalloy – terminating CMI Order?

Bhooma, I have been asked by Techalloy's attorney whether we can terminate the CMI Order, by signing the Acknowledgment of Termination which is Attachment II of the CMI Order. (Termination of the ORder is addressed in Section XXVI of the CMI Order.) On September 9, 2002, Allen Wojtas sent Scott Carr a letter stating that "the technical requirements of the Administrative Order for CMI have been met". It is that letter which is prompting the inquiry from Techalloy's attorney (I didn't have this letter in my file – the attorney faxed it to me – and don't recall Allen running it by me at all.)

Also, Techalloy wants to know if EPA allow the financial assurance (\$3 million) to be removed/withdrawn, or reduced.

(I only have a few notes on how the financial assurance was calculated by Techalloy/Sema and reviewed and

okayed by Mike Valentino. Hopefully you have more in your file. From my notes I cannot tell for certain that

any of the FA was intended to cover operation and maintenance of the chosen remedy.)

We don't have to resolve this immediately, but I thought you should start thinking about it. Perhaps you can ask your section chief, or ask around in the corrective action group, whether anyone has experience in terminating a CMI Order. (The RFI/CMS Order for Techalloy was terminated a few years ago.)

Has anyone done this in R5? (ORC's corrective action expert, Rich Clarizio, did not know of Region 5 ever

terminating a CMI Order.) If so, did we do so when O&M still remained? Or did we refuse to terminate until the

O&M was finished? What contingencies did we impose?

Does Techalloy have an O&M Plan? Is that what it is operating under now?

September 20, 2000

VIA CERTIFIED MAIL

Regional Administrator, U.S. EPA Region 5
Mail Code R-19 J
77 West Jackson Blvd.
Chicago, IL 60604-3590

RECEIVED
OCT 08 2000
DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

**Re : Corporate Guarantee for Corrective Measures Implementation
Techalloy Company, Inc., Olson&Jefferson Streets, Union IL60180
Docket number R8H-5-99-008**

Dear Sir,

We, Ugine Savoie Imphy, a business corporation organized under the laws of France, are the parent company of Techalloy Company Inc. We are herewith presenting a guarantee on behalf of our subsidiary, owning / operating the following hazardous waste management facility :

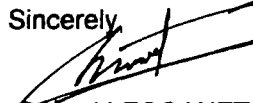
EPA ID No. ILD 005 178 975, Olson&Jefferson Streets, Union, IL 60180,

for corrective measures implementation, as set forth in U.S. EPA Docket No. R8H-5-99-008.

Attached are following documents :

- (1) Corporate Guarantee made by Ugine-Savoie Imphy,
- (2) Letter from Ugine-Savoie Imphy's Chief Financial Officer
- (3) Original of the Company Public Accountant's report on examination of Ugine-Savoie Imphy's financial statements for 1999 (in french), as well as an english translation thereof
- (4) Special Report from the CPA to Ugine-Savoie Imphy stating that the CPA has compared the data provided in the CFO's letter with the data provided in the audited financial statements and that no matters came to their attention which caused them to believe that the specified data should be adjusted.

We thank you in advance for considering these documents.

Sincerely,

Gerard LECOANET

Enclosure

cc : Mrs. Jacqueline Kline, Office of General Counsel
Mr. Alan Wojtas, RCRA Enforcement Branch

CORPORATE GUARANTEE FOR CORRECTIVE MEASURES IMPLEMENTATION

Guarantee made this August 28, 2000 by UGINE-SAVOIE IMPHY, a business corporation organized under the laws of FRANCE, handling in the United States principally through its affiliate Ugine Stainless & Alloys, Inc., 2975 Advance Lane, Colmar, PA, and herein referred to as guarantor.

This guarantee is made on behalf of our subsidiary, Techalloy Company, Inc., Olson & Jefferson Streets, Union IL 60180, for corrective measures implementation, as set forth in the Administrative Order on Consent for Corrective Measures Implementation, U.S. EPA Docket No. R8H-5-99-008, dated September 30, 1999 (hereafter "AOC").

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 265.143(e).

2. Techalloy Company, Inc. owns or operates the following hazardous waste management facility covered by this guarantee: EPA ID No. ILD 005 178 975, Olson & Jefferson Streets, Union, IL 60180. This corporate guarantee satisfies the requirement for financial assurance for corrective measures implementation at the above-named facility in the amount of \$3,000,000 as set forth in the AOC.

3. For value received from Techalloy Company, Inc., guarantor guarantees to EPA that in the event Techalloy fails to implement the corrective measures required by the AOC, the guarantor shall do so up to the amount specified in the AOC.

4. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the EPA Regional Administrator for the Region in which the facility is located and to Techalloy Company, Inc. that he intends to provide alternate financial assurance as specified in subpart H of 40 CFR part 265, in the name of Techalloy Company, Inc. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless Techalloy Company, Inc. has done so.

5. The guarantor agrees to notify the EPA Regional Administrator by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, or of comparable insolvency proceedings under the laws of France, naming guarantor as debtor, within 10 days after commencement of the proceeding.

6. Guarantor agrees that within 30 days after being notified by an EPA Regional Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate financial assurance

Letter from Chief Financial Officer

To the Regional Administrator, United States Environmental Protection Agency, Region 5 :

I am the chief financial officer of UGINE-SAVOIE IMPHY, Avenue Paul Girod, 73400 Ugine (France). This letter is in support of this firm's use of the financial test to demonstrate financial assurance for corrective measures implementation, as specified in the Administrative Order on Consent for Corrective Measures Implementation, U.S. EPA Docket No. R8H-5-99-008, effective September 30, 1999.

1. This firm is the owner or operator of the following facilities for which financial assurance for corrective measures implementation is demonstrated through the financial test specified in subpart H of 40 CFR part 264: **NONE**

2. This firm guarantees, through the guarantee specified in subpart H of 40 CFR part 264, the implementation of corrective measures identified in the Administrative Order on Consent for Corrective Measures Implementation, US EPA Docket No. R8H-5-99-008, effective September 30, 1999, at the following facility owned or operated by the guaranteed party : Techalloy Company, Inc., Union, Illinois Facility. Olson & Jefferson Street, Union, IL 60180. EPA ID # ILD 005 178 975. The Administrative Order on Consent requires that financial assurance for corrective measures implementation be provided in the amount of \$3,000,000. The firm identified above is the direct or higher-tier parent corporation of the owner or operator.

This firm is not required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest fiscal year, ended December 31, 1999.

1. Total required financial assurance : \$3,000,000
- 2*. Total liabilities : \$ 240,600,000
- 3*. Tangible net worth : \$ 231,460,000
- 4*. Net worth : \$ 232,550,000
- 5* Current assets : \$ 136,180,000
- 6* Current liabilities : \$ 102,100,000
7. Net working capital (line 5* minus line 6*) : \$ 34,080,000
- 8*. The sum of net income plus depreciation, depletion, and amortization : \$ 13,666,000
- 9*. Total assets in U.S. : \$ 18,700,000
10. Is line 3 at least \$ 10 million ? YES/NO **YES**
11. Is line 3 at least 6 times line 1 ? YES/NO **YES**

12. Is line 7 at least 6 times line 1 ? YES/NO **YES**
- 13*. Are at least 90% of firm's assets located in the U.S. ? If not, complete line 14 ; YES/NO **YES**
14. Is line 9 at least 6 times line 1 ? YES/NO **YES**
15. Is line 2 divided by line 4 less than 2.0 ? YES/NO **YES**
16. Is line 8 divided by line 2 greater than 0.1 ? YES/NO **NO**
17. Is line 5 divided by line 6 greater than 1.5 ? YES/NO **NO**

I hereby certify that the wording of this letter is comparable to the wording specified in 40 CFR 264.151 (f) as such regulations were constituted on the date shown immediately below.



Didier Dufrane
Chief Financial Officer
August 28, 2000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

MAR 09 2000

DE-9J

Mr. Carlos J. Serna
Senior Project Manager
Roy F. Weston, Inc.
3 Hawthorn Parkway
Suite 3
Vernon Hills, Illinois 60061-1450

Re: Change in Order of Implementation
Of Remedial Technologies
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Serna:

By letter dated February 15, 2000, Roy F. Weston, on behalf of Techalloy Company, Inc. (Techalloy) submitted a proposal to the United States Environmental Protection Agency (U.S. EPA) to change the order of implementation of remedial technologies at the facility. These remedial technologies are to be implemented pursuant to the Consent Order (R8H-5-99-008) issued to Techalloy by U.S. EPA on September 30, 1999.

The Consent Order currently presents the following order of implementation of the remedial technologies; soil stabilization, engineered cap, and lastly soil vapor extraction and air sparging. The proposed change would require that the groundwater remediation activities (soil vapor extraction and air sparging) be implemented first followed by the soil remediation technologies (soil stabilization and engineered cap). The proposed change would not alter the overall schedule for completion of the project, and would prevent the need to remove portions of the engineered cap to install the groundwater remediation technologies.

U.S. EPA agrees that the proposed change in the order of implementation of the remedial technologies at Techalloy is necessary. According to paragraph XXIII.D of the Consent Order, Techalloy is allowed to request of U.S. EPA that compliance dates

be modified, and U.S. EPA can approve such requests in writing. The approved modified compliance dates are incorporated by reference into the Consent Order (Consent Order, paragraph XXIII.E). Therefore, the Consent Order itself does not need to be formally modified.

This letter is U.S. EPA's formal approval of the proposed change in the order of implementation of the remedial technologies and respective modified compliance dates. This letter and the attached schedule are hereby incorporated by reference into the Consent Order. As such, deviations from the attached schedule will be deemed violations of the Consent Order.

If you have any questions, please feel free to contact me at (312) 886-6194. Legal questions can be directed to Jacqueline Kline, Associate Regional Counsel at (312) 886-7167. Thank you for your cooperation in this matter.

Sincerely yours,

Allen T. Wojtas

Allen T. Wojtas
Project Manager
Enforcement and Compliance Assurance Branch

Attachment

cc: Henry Lopes, Techalloy, w/o schedule
Scott Carr, Techalloy, w/o schedule

bcc: J. Kline, ORC



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

15 February 2000

Mr. Allen Wojtas
U.S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Change in Order of Implementation of Remedial Technologies
Techalloy Company Inc., Union, Illinois

Dear Mr. Wojtas:

Roy F. Weston, Inc. (WESTON®) and Techalloy Company Inc. (Techalloy) have met with the U.S. EPA to discuss on-site remediation activities and the recent Consent Order signed by Techalloy. The on-site remediation technologies that are to be installed and operated by Techalloy include soil stabilization, soil vapor extraction, air sparging, and engineered cap. Specifications and schedule for implementation of these technologies are presented in the recent Consent Order. The purpose of this letter is to request a change in sequence of implementation of the remediation activities described above.

The Consent Order presents the following order of implementation of the remediation technologies; soil stabilization, engineered cap, and lastly soil vapor extraction and air sparging. If the items were implemented in this order, portions of the cap would be removed in order to later install the soil vapor extraction and air sparging system. Also from a technical prospective it is more important to remediate the groundwater first. Groundwater contaminants are migrating off-site, while the metals contaminants are not, but are isolated on-site. Techalloy is requesting that the groundwater remediation activities (soil vapor extraction and air sparging) be constructed first and then followed by soil remediation activities (soil stabilization and air sparging). However, it should be noted that some limited soil stabilization would need to be performed during the construction of the groundwater system, where the systems overlap.

Changing the order of the remedial technologies does not alter the duration required to complete the remediation or the reporting requirements stipulated in the Consent Order. Changing the order of implementation just makes sense from a technical perspective and is actually more protective of the environment by addressing the most important issue first.

The U.S. EPA has agreed that this approach is logical and that Techalloy should proceed first with the implementation of groundwater technologies.





Mr. Allen Wojtas
U.S. Environmental Protection Agency

-2-

15 February 2000

During our most recent meeting we provided you with a schedule that fulfills the activities present in the Consent Order, but also changes the order of remedial technologies, so that groundwater is addressed first. Please find enclosed an additional copy of this schedule.

The U.S. EPA did not think that changing the order of implementing the remedial technologies would require modifications to the Consent Order and that the Consent Order would not need to be reissued, since no duration or reporting requirements would be changed.

If you have any questions or require more information please do not hesitate to contact me at 847.918.4002.

Very truly yours,

ROY F. WESTON, Inc.

Carlos J. Serna
Senior Project Manager

cc: Henry Lopes, Techalloy
David Williams, Techalloy
Scott Carr, Techalloy
Jack Thorsen, WESTON
Rick Swearingen, WESTON

SEP 15 1998

Mr. Edwin C. Bakowski
Manager, Permit Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue
Springfield, Illinois, 62702-3998

DE-9J

Re: Corrective Action
Techalloy Company, Inc.
Union, Illinois
ILD 005 178 975

Dear Mr. Bakowski:

The United States Environmental Protection Agency (U.S. EPA) is currently developing a new Consent Order requiring Techalloy to implement the corrective action remedy selected by U.S. EPA. The specifics of the selected remedy were provided in the Facility Final Decision/Response to Comments document. A copy of this document was sent to you.

Three hazardous waste management units at the Facility are undergoing closure, and implementation of the remedy and closure of the units appear to be closely related. On May 15, 1998, Techalloy submitted to your Agency a Closure Documentation Report for the waste management units. Should your Agency determine that closure of the units requires additional work to that of the remedy implementation, Techalloy and U.S. EPA should be informed of such determination so that the closure and corrective action can be coordinated.

It is anticipated that the new Order as finalized will require Techalloy to initiate the remedy implementation by March or April of 1999. The anticipated start date should provide sufficient time for your Agency to establish the closure criteria and work requirements. U.S. EPA will make every effort to coordinate the corrective action with closure of the units. However, the timely

implementation of corrective action for site remediation is a high priority with U.S. EPA, and the Agency intends to proceed with the schedule as specified in the Order. An initial draft of the new Order was E-mailed to Kevin Lesko recently.

If you have any questions, please call William Buller at (312) 886-4568.

Sincerely,

Lorna M. Jereza, P.E., Chief
IL/IN Section
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

cc: Kevin Lesko, IEPA

bcc: Karen Peaceman, ORC

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
<i>MP</i> 8/6/98			<i>WJ</i> 9/15/98		

MEMO TO SITE FILE

DATE: 14 October 1999

TO: Techalloy File

FROM: Michael Valentino *mw*
IL/IN/MN Compliance Section 1

RE: Modifications to CMI Consent Order and Scope of Work
Techalloy Company, Inc. Site, Union, IL
ILD 005 178 975

On Thursday, 7 October 1999, George Hamper and I met with Henry Lopes, Vice President, Techalloy Company, Inc., and Carlos Serna of Roy F. Weston, Inc. At Mr. Serna's request, we met to discuss the corrective measures implementation (CMI) schedule in the recently signed Administrative Order on Consent (Docket No. R8H-5-99-008, 30 September 1999). The major components of the corrective measures include: institutional controls; continuation of private well sampling program; continued operation of groundwater recovery system; soil stabilization within a corrective action management unit (CAMU) [for elevated metals in soils]; installation of an asphalt cap over the CAMU area; focused air sparging and soil vapor extraction (AS/SVE) system [for volatile organics in the vadose zone]; and groundwater monitoring.

The order of CMI tasks, as presented in the AOC and Statement of Work (SOW) calls for soil stabilization within the designated CAMU and construction of the cap *prior to* the final design and construction of the AS/SVE system. Techalloy and Weston have requested a change in the *sequence* of CMI tasks. The end result, as we shall see below, will *not* impact the project timeline; nor will any tasks fail to be performed. Elevated levels of organics, specifically of trichloroethene (TCE), at the two groundwater extraction wells have prompted a reevaluation on the part of Techalloy and Weston of the corrective measures sequence. The AS/SVE system targets volatile organics in the vadose zone. The drawdown from the two extraction wells, which are situated roughly 4000 feet down-gradient of the VOC source area and operated at approximately 600 gallons per minute, may be creating the higher levels of TCE in the influent to the air stripper. Techalloy and Weston therefore have proposed to expedite implementation of the AS/SVE component of the remedy. The intent is to reduce concentrations of VOCs in the current source area, thereby resulting in lower concentrations at the down-gradient recovery wells.

The Order states, at Section VIII, "Work To Be Performed," that within 120 days of completion of the asphalt pad, Techalloy is required to submit a Draft Final Design which includes the elements of Task III of the SOW. Task III subtasks include the development of an AS/SVE pilot study, design of the AS/SVE system and final construction. Techalloy is required by the Order to have the AS/SVE system fully operational within 120 days of EPA's approval of the Final Design. The sequence of tasks in the selected remedy would result in the construction of the cap over the CAMU prior to installation of underground piping for the AS/SVE system. Consequently, Techalloy would need to, under the present sequence, partially remove the cap and replace sections of it so that the air sparging wells and extraction wells could be installed. Moreover, by targeting VOCs in the subsurface first, the total VOC loading to the aquifer and to the air stripper would be reduced. This rationale appears to make good sense. George and I concurred with Techalloy's logic. It was asked of Techalloy why this was not addressed earlier. Evidently, no one seriously questioned the initial staging of tasks and secondly, the increase in TCE levels at the recovery wells was not anticipated so soon after the system was made fully operational.

Techalloy presented a revised CMI Schedule on October 7th. The timeline projects out to mid-November of 2001 for completion of the cap. Revision of the site deed restrictions would run to mid-January of 2002. As the Order calls for the design and construction of the AS/SVE system to follow the completion of soils stabilization and cap construction, simply inverting these tasks, with the AS/SVE to predate the soils component of the remedy results in the same number of *total* days to execute all the tasks and subtasks. Techalloy's timeline, it was pointed out by us, could be further reduced by 60 days simply by initiating the stabilization request for proposals and bid solicitation process midway through the AS/SVE construction phase. Techalloy and Weston agreed to this change. A revised project timeline will be submitted in the very near future. We therefore agreed that the cap would be in place in mid-September of 2001.

In summary, the proposal appears to be technically sound. An amendment to the Order is necessary as the order of events in Section VIII will be changed. Also, revisions to the SOW must be made.

CC: George Hamper
Lorna Jereza
Allen Wojtas
Jacqueline Kline



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

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9/2/96 Org to RCRH file
Letter to J. Kachner
26 August 1996

Mr. William Buller
U.S. EPA, Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Work Order No. 01989-018-002

Re: Grain Size Analysis of Soil Samples Collected from Test Hole in Union, Illinois

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is providing the United States Environmental Protection Agency (U.S. EPA) with the results of the grain size analysis for soil samples collected from a test hole and conducted as part of the implementation of Interim Measures. The test hole was drilled on 14 and 15 August 1996 and was located within approximately 15 feet of the proposed location of the extraction well.

A total of 14 soil samples were collected from the top of the water table to the base of the aquifer. Stiff silty clay was encountered at an approximate depth of 77.8 feet below ground surface (bgs). A copy of the results of the grain size analysis conducted by Philip Environmental Services is enclosed with this letter.

The results of the grain size analysis indicate that the grain size profile of the formations for the most part consists of poorly graded sands, gravelly sands with little fines (SP). Some of the samples also indicated the presence of clayey sands and sand-clay mixtures (SC). To determine the appropriate slot openings WESTON adopted a conservative approach in selecting a slot size that will allow 40 percent of material to pass and 60 percent to be retained. A summary of the U.S. Standard Sieve, Grain Sizes and the corresponding slots size required is presented in the enclosed Figure 1-1.

Based on the findings presented in Figure 1-1, WESTON intends to use an 8-inch diameter, 45-foot Type 304 stainless steel screen with 0.016-inch slots. The screen will be placed between 30 and 75 feet bgs. This extraction well will have the design capacity to extract over 500 gpm, but will pump at the required 350 gpm.

The filter gravel pack was selected based on 70 percent retained fraction of grain size and then multiplied by 5 (commonly used gravel pack ratio). WESTON used the first grain size portion of the screened interval, which was at 40 feet and resulted in a gravel pack of 1.33 mm. A commercially available gravel pack within the prescribed size will be used.



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U.S. EPA, Region V

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WESTON will be installing the extraction well starting on 3 September 1996 and will be completed within two weeks.

If you have any questions or require additional information, please do not hesitate to contact me at (708) 918-4000.

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Very truly yours,
ROY F. WESTON, INC.



Carlos J. Serna, P.G.

cc: Kevin Lesko, IEPA
Henry Lopes, Techalloy
David Williams, Techalloy
Sean Edson, WESTON

